

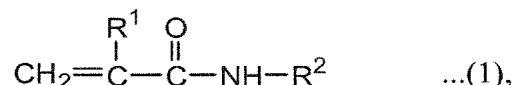
Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

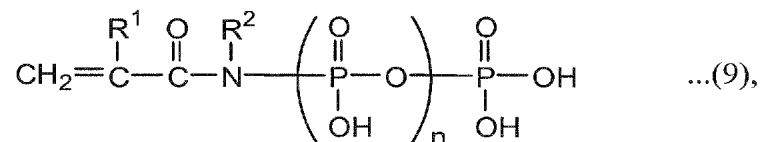
Claims 1-33 (canceled)

34. (Previously presented) A phosphorus-acid-group-containing (meth)acrylamide comprising (meth)acrylamide represented by the following formula (1):

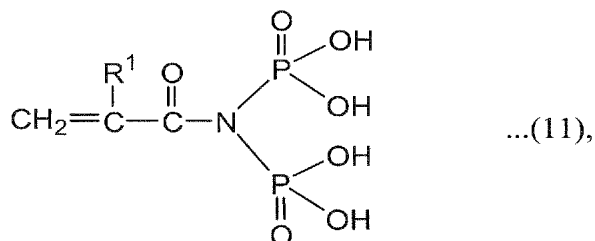


wherein R¹ is a hydrogen group or a methyl group, and R² is a hydrogen group or a substituted or unsubstituted hydrocarbon group, and a phosphorus acid group directly bonded to a nitrogen atom of an amide group in said (meth)acrylamide monomer.

35. (Previously presented) The phosphorus-acid-group-containing (meth)acrylamide according to claim 34, comprising (poly)phosphonic (meth)acrylamide represented by the following formula (9):

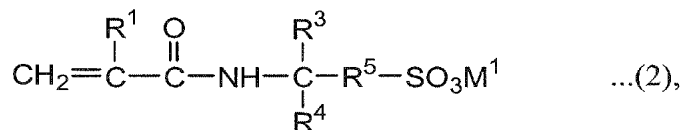


wherein R¹ is a hydrogen group or a methyl group, and R² is a hydrogen group or a substituted or unsubstituted hydrocarbon group, and n is an integer of 0-2, and/or N,N-diphosphonic (meth)acrylamide represented by the following formula (11):



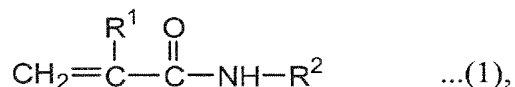
wherein R^1 is a hydrogen group or a methyl.

36. (Previously presented) The phosphorus-acid-group-containing (meth)acrylamide according to claim 34, wherein said (meth)acrylamide is at least one selected from the group consisting of acrylamide, methacrylamide, and acrylamide alkane sulfonate represented by the following formula (2):



wherein R^1 is a hydrogen group or a methyl group, R^3 and R^4 are a hydrogen group or an alkyl group having 1-3 carbon atoms, R^5 is an alkylene group having 1-3 carbon atoms, and M^1 is a hydrogen group, a metal or a tertiary-amine group.

37. (Currently amended) A phosphorus-acid-group-containing (meth)acrylamide polymer obtained by polymerizing a phosphorus-acid-group-containing (meth)acrylamide monomer comprising (meth)acrylamide represented by the following formula (1):



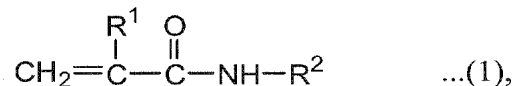
wherein R^1 is a hydrogen group or a methyl group, and R^2 is a hydrogen group or a substituted or unsubstituted hydrocarbon group, and a phosphorus acid group directly bonded to a nitrogen atom of an amide group in said (meth)acrylamide,

said polymer having electric conductivity.

38. (Currently amended) The electrically conductive, phosphorus-acid-group-containing (meth)acrylamide polymer according to claim 37, comprising as comonomers (a) an unsaturated compound containing one or more ethylenically unsaturated bonds and one or more acid groups in a molecule, and/or (b) an unsaturated compound containing one or more ethylenically unsaturated bonds but no acid group in a molecule.

39. (Currently amended) The electrically conductive, phosphorus-acid-group-containing (meth)acrylamide polymer according to claim 37, wherein it is obtained by copolymerizing with (a) a phosphatized, alcoholic-hydroxyl-group-containing, unsaturated compound, and/or (b) a cross-linking agent having two or more ethylenically unsaturated bonds in a molecule.

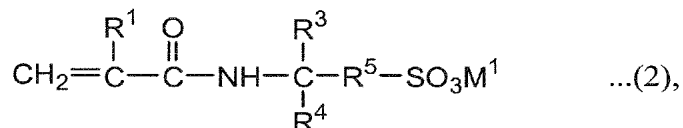
40. (Currently amended) A conductive resin comprising a phosphorus-acid-group-containing (meth)acrylamide polymer, which is ~~obtained by polymerizing~~ a polymerization product of a phosphorus-acid-group-containing (meth)acrylamide monomer comprising (meth)acrylamide represented by the following formula (1):



wherein R¹ is a hydrogen group or a methyl group, and R² is a hydrogen group or a substituted or unsubstituted hydrocarbon group, and a phosphorus acid group directly bonded to a nitrogen atom of an amide group in said (meth)acrylamide, wherein said polymer is electrically conductive.

41. (Previously presented) The conductive resin according to claim 40, comprising at least one selected from the group consisting of unsaturated alcohol copolymers comprising an unsaturated alcohol unit and a vinyl halide unit and/or an aliphatic acid vinyl ester unit, partially acetalized unsaturated alcohol polymers, melamine resins, poly(meth)acrylonitrile, poly(meth)acrylate, polyacrylamide, poly(meth)acrylic acid, polyacetal, urethane resins, cellulose and its modified products, polystyrene, polyvinyl chloride, and polyvinyl acetate.

42. (Previously presented) The conductive resin according to claim 40, wherein said (meth)acrylamide monomer is at least one selected from the group consisting of acrylamide, methacrylamide, and acrylamide alkane sulfonate represented by the following formula (2):



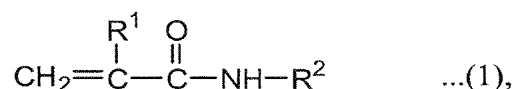
wherein R¹ is a hydrogen group or a methyl group, R³ and R⁴ are a hydrogen group or an alkyl group having 1-3 carbon atoms, R⁵ is an alkylene group having 1-3 carbon atoms, M¹ is a hydrogen group, a metal or a tertiary-amine group.

43. (Previously presented) The conductive resin according to claim 40, wherein said phosphorus-acid-group-containing (meth)acrylamide polymer comprises as comonomers (a) an unsaturated compound containing one or more ethylenically unsaturated bonds and one or more acid groups in a molecule, and/or (b) an unsaturated compound containing one

or more ethylenically unsaturated bonds but no acid group in a molecule.

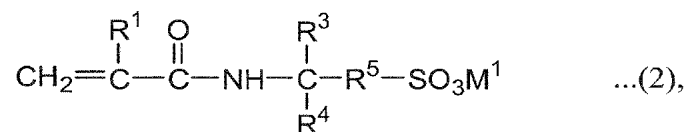
44. (Previously presented) The conductive resin according to claim 43, wherein said unsaturated compound is a cross-linking agent having two or more ethylenically unsaturated bonds in a molecule.

45. (Currently amended) A polymer electrolyte membrane ~~made of~~ comprising a polymer of a phosphorus-acid-group-containing (meth)acrylamide monomer, which comprises (meth)acrylamide represented by the following formula (1):



wherein R^1 is a hydrogen group or a methyl group, and R^2 is a hydrogen group or a substituted or unsubstituted hydrocarbon group, and a phosphorus acid group directly bonded to a nitrogen atom of an amide group in said (meth)acrylamide, wherein said membrane is electrically conductive.

46. (Currently amended) The polymer electrolyte, electrically conductive membrane according to claim 45, wherein said (meth)acrylamide monomer is at least one selected from the group consisting of acrylamide, methacrylamide, and acrylamide alkane sulfonate represented by the following formula (2):

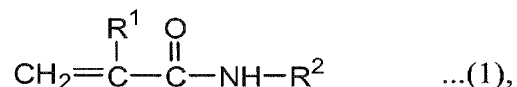


wherein R^1 is a hydrogen group or a methyl group, R^3 and R^4 are a hydrogen group or an alkyl group having 1-3 carbon atoms, R^5 is an alkylene group having 1-3 carbon atoms, M^1 is a hydrogen group, a metal or a tertiary-amine group.

47. (Currently amended) The polymer electrolyte, electrically conductive membrane according to claim 45, wherein said polymer comprises as comonomers (a) an unsaturated compound containing one or more ethylenically unsaturated bonds and one or more acid groups in a molecule, and/or (b) an unsaturated compound containing one or more ethylenically unsaturated bonds but no acid group in a molecule.

48. (Currently amended) The polymer electrolyte, electrically conductive membrane according to claim 45, wherein said unsaturated compound is a cross-linking agent having two or more ethylenically unsaturated bonds in a molecule.

49. (Previously presented) A method for producing phosphorus-acid-group-containing (meth)acrylamide, comprising (a) reacting (meth)acrylamide represented by the following formula (1):



wherein R^1 is a hydrogen group or a methyl group, and R^2 is a hydrogen group or a substituted or unsubstituted hydrocarbon group, with phosphoric anhydride and/or phosphorus oxychloride, and hydrolyzing the resultant product, or (b) reacting said (meth)acrylamide with at least one selected from the group consisting of phosphoric acid, pyrophosphoric acid

and polyphosphoric acid, in a solvent containing no active hydrogen and/or an acidic solvent.

50. (New) The polymer electrolyte membrane having electric conductivity according to claim 45, wherein said electric conductivity is proton conductivity of 10^{-4} - 10^{-2} S cm⁻¹ under the conditions of a temperature of 35-80°C and a relative humidity of 90%.

51. (New) The polymer electrolyte membrane having electric conductivity according to claim 46, wherein said electric conductivity is proton conductivity of 10^{-4} - 10^{-2} S cm⁻¹ under the conditions of a temperature of 35-80°C and a relative humidity of 90%.